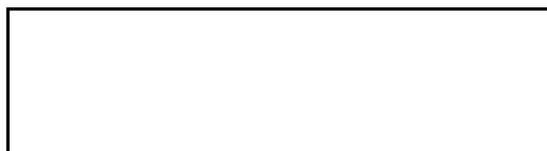


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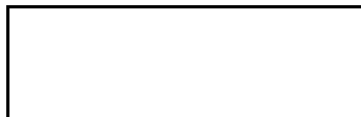


FIFTH MONTHLY NARRATIVE REPORT

15 December 1964

REFERENCE

STAT



Declass Review by NGA.

REPORTING INTERVAL

10 November 1964 - 10 December 1964

OBJECTIVE

The objective of this program is the design, construction, and testing of a prenormalizing system to be used for problems of automatic target identification on aerial imagery. The prenormalizer will scan the image and, by special filtering techniques, produce a set of measurements which have minimal change with translation and rotation of the specific image on the scene. Testing is to be accomplished on the CONFLEX I Adaptive Recognition System.

STATUS OF ACTIVITIES AND ACCOMPLISHMENTS

THE PRENORMALIZING SYSTEM:

The Scanning System. All portions of the integral scanning system are in various stages of fabrication. The parts for the rotating mirror assembly are essentially complete and assembly and balancing are ready to be carried out. Several optical parts including the lenses and mirrors are still on

delivery and expected imminently. The power supply for the slit illumination lamps and the photo-multiplier has been assembled and debugged.

The Filter Bank. The construction of the bulk of secondary filters is under way and approximately twenty percent complete. All packaging hardware is complete with trays and card guides assembled for installation. Parts for the preliminary filters are partially in stock.

The Interface With CONFLEX I. All analog gate modules to couple the filter measurement data to the CONFLEX System are complete.

Readout Display. All hardware for the readout display system is now in stock and has been scheduled for wire shop assembly. This display will provide analog (lamp intensity) readout of the 400 circular analysis filters and the twenty preliminary filters on the front panel of the electronic rack.

Summary. The status of the entire system is summed up in the following table:

Design	95 percent complete
Fabrication	40 percent complete
Assembly	10 percent complete

TIME SPENT ON PROJECT (CUMULATIVE TOTAL)

STAT	<div style="border: 1px solid black; width: 180px; height: 50px;"></div>	103 Hours
		292 Hours

TECHNICAL AGREEMENTS MADE

None

DIFFICULTIES ENCOUNTERED

None

PROGRAM FOR THE NEXT INTERVAL

During the next interval, it is expected that the majority of the fabrication will be completed. Assembly and inter-connecting cabling will be started in the electronic racks. Among the various special circuits to be constructed in this interval will be the final video amplifier package, the photo-multiplier head to be used on the scanner, the preliminary filters and the threshold circuit. These circuits constitute the remainder of the electronic packages required for the system. Final assembly and wire of fabricated circuits will continue at a pace consistent with the circuit assembly rate.

SUBMITTED BY

A rectangular box with a black border, used to redact the signature of the person submitting the report.

Project Engineer

Vice President,
Engineering

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